

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. – 16. (canceled)

17. (Currently amended) A reductant injection system for reducing exhaust gas  $\text{NO}_x$  in lean-burn engines, comprising:

a catalytic reactor having an inlet end which receives exhaust gas containing  $\text{NO}_x$ , an outlet end which outputs converted exhaust gas, and a port;

a catalyst mounted inside the catalytic reactor for reducing  $\text{NO}_x$  in the received exhaust gases to  $\text{N}_2$  in the presence of a fuel, wherein the catalyst comprises a perovskite compound represented by the formula  $\text{AB}_{1-x}\text{PM}_x\text{O}_3$ , where A is a rare-earth metal, B is a transition metal, PM is a precious metal, and O is oxygen, and is positioned downstream of the port in catalytic reactor; and

a fuel injector coupled to the port in the catalytic reactor and being positioned upstream of the catalyst, wherein the fuel injector injects diesel fuel in the exhaust gas prior to the exhaust gas passing through the catalyst, wherein the fuel is used as a reductant.

18. (Previously amended) The system of claim 17, further comprising a partial oxidation catalyst mounted downstream of the catalyst.

19. (canceled)

20. (canceled)

21. (Currently amended) The system of claim ~~20~~ 17, wherein A comprises lanthanum, B comprises manganese, PM comprises ruthenium, and x ranges from about 0.01 to 0.3.

22.-62. (cancelled)